

# **EXHIBIT 4**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION**

_____	)	
ORACLE AMERICA, INC.	)	
	)	
Plaintiff,	)	
	)	
v.	)	Case No. 3:10-CV-03561-WHA
	)	
GOOGLE, INC.	)	
	)	
Defendant.	)	
_____	)	

**EXPERT REPORT OF DR. IAIN M. COCKBURN**

**February 3, 2012 – ATTORNEYS' EYES ONLY**

144. In applying this framework, I have also considered the myriad benefits provided to Google by Android and enabled by the patents-in-suit, as well as alternatives available to Google. I have addressed this in Sections VIII and IX. Consistent with the opinions expressed by Google employees and experts, I conclude that Google saw tremendous revenue potential, time-to-market advantages, and other strategic benefits from Android and the infringement, and had no credible alternatives either to Java as a whole or the individual patents-in-suit. These considerations suggest that Google would have reasonably expected and agreed to pay a substantial amount to Sun, which I have calculated as at least between \$68.3 and \$220.1 million through 2011.

## **II. Background: Android and Google’s Business Model**

145. This section provides background information regarding Google, its business model and the ways in which Google expected to benefit and in fact has benefitted and will benefit from Android. The benefits from Android are discussed in more detail in Section VIII, which evaluates Google’s willingness to pay for the hypothetical license based on the expected benefits from the infringement.

### **A. Google’s Search and Advertising Framework**

146. Search, a service that is free to the end user, is at the heart of Google’s business. The model is simple: Google’s search engine is effective, fast, and free, and Google has attracted many users. Instead of charging users for searching web pages, Google places advertisements on the pages listing results from those searches, and it then generates revenues from advertisers. As such, Google’s business depends on scale. The more users use the search engine, the more attractive it is for advertisers to place ads on Google search result pages. When users search more often, Google makes more revenue through ads. As Jonathan Rosenberg said during one earnings call:<sup>52</sup>

“This is not philanthropy. When [the] web is better more people use it more often and that means they search more often. Android is a leading example of this.”

<sup>52</sup> Google Inc., “Q2 2010 Earnings Call Transcript,” July 15, 2010, accessed at <http://www.morningstar.com/earnings/15822015-google-inc-goog-q2-2010.aspx>, p. 12.

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include the APIs at issue. . . .<sup>784</sup> In the absence of Java-based Android, it is my opinion that Sun would have realized the revenues that Sun projected at the time. Java ME licensees would have no free alternative to procure a clone of the Java runtime, and Acadia would have been able to compete as a full stack without a free operating system “suck[ing] all of the air out of the room.”<sup>785</sup>

695. I am aware that infringer’s profits must not double count against actual damages. To the extent that Google demonstrates its deductible expenses, and demonstrates that some portion of its Android revenues are attributable to factors other than its infringement, there may not be any possibility of double-counting. I will address any possibility that actual damages include some portion of infringer’s profits once Google has offered evidence on this issue.



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Iain M. Cockburn

February 3, 2012

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<sup>784</sup> Astrachan Opening Report, p. 73 ¶ 130–31.

<sup>785</sup> Screven 7/29/2011 Individual Depo. Tr. at 71:19–22 (“I don’t believe that there is a strategy that we could adopt at this point, right, to displace Android given that they’ve sucked all of the air out of the room for Java on smartphones.”); *id.* at 110:25–112:2 (explaining that Java is “pretty well locked out of the smartphone market because of Android”). Likewise, Rizvi testified that he had no reason to believe that a full stack smartphone platform based on Java would fail to be competitive, in the absence of Android. Rizvi 7/28/2011 Depo. Tr. at 265:9–266:8.